What Can You Do?

GET INVOLVED! As a landowner or farm operator in the Price Creek watershed you have the opportunity to help improve this valuable resource. Currently cost-share is available for a variety of practices that may not only improve the value and profitability of your operation but also can contribute significantly to improving water quality by reducing the amount of sediment, nutrients, and bacteria leaving the land. Some of the practices available through the Price Creek Watershed Project include:

- Fencing
- Heavy Use Protection areas
- Livestock water establishment (wells, ponds, pumping plants, pipeline, tanks)
- Pasture, Hayland, and Critical Area Seeding
- Grade Stabilization Structures
- Grassed Waterways
- Water & Sediment Control Basins
- Terraces
- Streambank stabilization

IOWATER SNAPSHOT SAMPLING

You can also become an IOWATER volunteer water monitor for Price Creek Watershed.

This is a limited time project. Now is the time to get involved! For more information on how you can become a cooperator please contact project coordinator Aaron Pickens at 319-668-2359 or by email at Aaron.Pickens@ia.nacdnet.net.

Financial Incentives for Conservation Practices

- Cost Share - Up to 75% for certain practices
- Incentive Payments - Per acre payments on management practices such as nutrient & brush management, no-till, and prescribed grazing
- CRP Buffers & Filerstrips - very competitive yearly payments, 10-15 year guaranteed income, up to 90% cost share for establishment
- Low Interest Loan Program - Administered through participating local bank of your choice, 3% interest, up to 10 year term for repayment

Who to Contact

Iowa County SWCD
435 N. Highland Street
Williamsburg, IA 52361
Phone: 319-668-2359

Benton County SWCD
1705 West D Street
Vinton, IA 52349
Phone: 319-472-2161

or

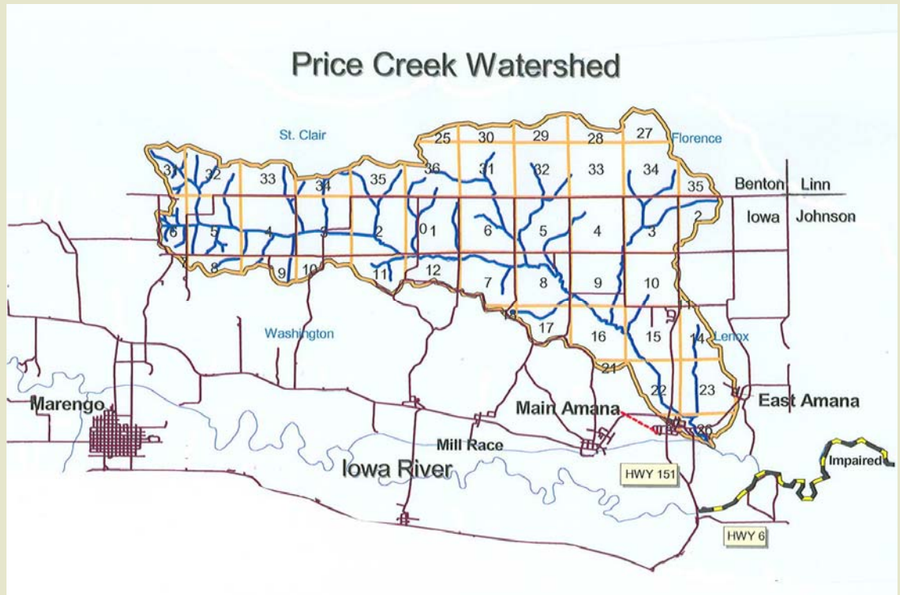
Email: Aaron.Pickens@ia.nacdnet.net

Aaron Pickens -
Watershed Coordinator

Funding for this project has been provided by the Iowa Department of Natural Resources through a grant from the U.S. Environmental Protection Agency under the Federal Nonpoint Source Management Program (Section 319 of the Clean Water Act), The Iowa Department of Agriculture's Water Protection and Watershed Protection Funds, and the Iowa Watershed Improvement Fund administered by the Iowa Watershed Improvement Review Board. Technical Assistance is being provided by the USDA's Natural Resources Conservation Service.

Price Creek Watershed Project

A joint project of the Iowa & Benton County Soil & Water Conservation Districts



A cooperative effort to accelerate the application of Best Management Practices on targeted lands within the Price Creek watershed to improve and protect water quality.

Price Creek Watershed

Price Creek is a 13 mile long stream located in SE Benton County and the NE corner of Iowa County. The watershed begins north of the town of Marengo and ends below the historic village of Amana where it flows into the Iowa River and the tail waters of the Coralville Reservoir.

The watershed is nearly 19,000 acres in size with 64% of the land considered highly erodable. The primary land use for the area is cropland and livestock production. Approximately 58% of the land in the watershed is in crop production and 34% is in pasture, hayland, or CRP.

Main Amana through which Price Creek flows, and the other six villages that make up the Amana Colonies is home to a variety of historic buildings, specialty shops, and events that make it one of Iowa's most famous tourist attractions.

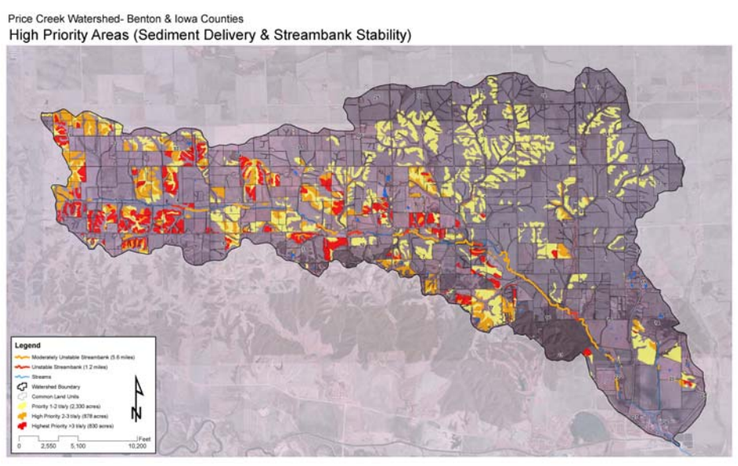
Aaron Pickens, with the Iowa Department of Agriculture and Land Stewardship's Division of Soil Conservation was recently hired as the project coordinator for the Price Creek Watershed Project (photo courtesy of Nick Naragon)

What Has Been Done

Last year the Iowa and Benton Soil and Water Conservation Districts completed a detailed watershed assessment gathering a variety of land use data as well as information regarding the physical condition of the stream. This data was used to establish priority areas within the watershed that have the greatest potential to impact water quality.

The two districts used this data to apply for special funding through the Iowa Department of Agriculture's Watershed Protection Program, the Iowa DNR's Section 319 program, and the Iowa Watershed Improvement Review Board.

Early this spring, the districts received word that the applications were approved for funding to support a three year effort. These funds will be utilized to hire a project coordinator, provide cost share incentives to producers for application of conservation practices, as well as support a variety of information and education activities including field days, workshops, and demonstration projects.



The Geographic Information Systems (GIS) map above shows estimated sediment delivery or the amount of soil reaching Price Creek from surrounding land. Maps like this are used to help pinpoint critical areas in the watershed and locate the most effective place for farmers to apply conservation practices to protect water quality.

A volunteer water monitoring effort was also initiated in 2005. Currently, 11 points along the stream are monitored three times year for a variety of physical and chemical parameters. This data is used to provide snapshots of water quality in the creek throughout the year.

Water Quality Concerns

Bacteria and Fecal Contamination

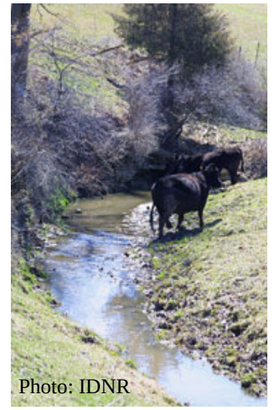


Photo: IDNR

The Problem

Price Creek joins the Mill Race southeast of Amana just before they jointly empty into the Iowa River. At this point, the Iowa River is listed as *impaired* on the states 303d List of Impaired Waters because of high bacterial levels, which come from fecal contamination. Failing and outdated septic systems, livestock access to streams, and lack of open lot manure storage are the three largest sources of fecal contamination in the Price Creek Watershed. The watershed assessment identified over seven miles of stream in which livestock have full or limited access.

The Solution

A variety of livestock management practices can be implemented to help reduce pollutants.

- Fencing can be installed to limit and even exclude livestock access to streams.
- Complete rotational grazing systems can be developed to further manage forages and increase the carrying capacity of pastures. A variety of additional practices can be utilized to establish a functional rotational grazing system.
- Conservation buffers and filterstrips can also be utilized along a stream to filter runoff and provide an added wildlife benefit.
- For those who have an animal feeding operation, a simple waste storage facility can be developed to capture solids and filter runoff.
- A nutrient management plan can be developed to help producers monitor soil and plant needs and apply only the necessary amounts and types of fertilizer needed.
- For homeowners, a low interest loan may be available through Iowa DNR's Onsite Wastewater Assistance Program to replace outdated or failing septic systems.

Soil Erosion and Sedimentation

Photo: IDNR

The Problem

Sediment is delivered to the stream in three basic methods: sheet & rill erosion, gully erosion, and streambank erosion. The watershed assessment identified nearly seven miles of streambank along Price Creek as unstable and over 4,000 acres of land with sediment delivery to Price Creek from sheet & rill erosion in excess of 1 ton/acre/year.

The Solution

Structural and management based practices designed to trap sediment and associated nutrients and reduce erosion include:

- Grade Stabilization Structures consists of a dam, embankment, or other structure designed to reduce water flow and stop an advancing gully.
- Terraces are either a farmable or non-farmable earthen berm designed to break up a long slope and intercept surface runoff.
- Water & sediment control basin is a short earthen berm built across a drainage way designed to intercept surface runoff and control erosion.
- Grassed waterways are installed in areas of concentrated waterflow. Grassed waterways are intended to eliminate gully erosion during heavy rainfall events.
- Conservation buffers and filterstrips can be installed along a stream to slow sediment and filter runoff before entering a stream. Buffers also help stabilize streambanks and provide habitat for wildlife.
- No-till farming practices can also be utilized to increase crop residue which provides valuable ground cover, protecting against soil erosion from wind and water.

Photo: IDNR